

Application No. 10/524,611
Amendment Dated June 8, 2007
Reply to Office Action of March 8, 2007

REMARKS

The Office Action mailed March 8, 2007, has been carefully considered by Applicant. Reconsideration is respectfully requested in view of the foregoing claim amendments and the remarks that follow.

Initially, Applicant notes that the application was amended at the international stage and was filed in the U.S. (in paper form) with only two claims (claims 1 and 2). It appears however that the Examiner based the initial examination on the *prior* and previously amended/cancelled set of claims (claims 1 through 4).

For the purposes of this response, Applicant proceeds under the basis that examination was conducted on the merits of claims 1-4. Claim numbering herein is based upon this understanding. If the Examiner has questions regarding this matter, he is encouraged to contact the undersigned attorney for applicant.

Claim Objections

Claims 1-4 have been objected to because of various informalities. By the present Amendment, claims 1-4 are cancelled. The objections are therefore rendered moot.

Claim Rejections

Claims 1 and 2 have been rejected under 35 U.S.C. §102(b) as being anticipated by Kobayashi et al U.S. Patent No. 5,269,518. Claims 1-3 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Alzano U.S. Patent No. 5,865,687. Claims 1, 2 and 4 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Getts U.S. Patent No. 5,460,378.

Claims 1-4 are hereby cancelled and replaced with new claims 5-27, which are believed to more particularly point out and distinctly claim the subject matter of the present invention and render the same allowable over the applied references.

In general, it is known in the art to add structure onto a golf club to increase the club's weight and thereby facilitate stable and proper swing of the club. Known devices for accomplishing these advantages include adjustable and releasable weights that are

added to the club shaft (both internally and/or externally on the shaft) and/or added to the club head.

One object of the present invention is to improve upon the prior art by providing a putter wherein the mass of the shaft is determined by the choice of material and dimensioning thereof. An embodiment of such an arrangement is depicted in Fig. 4 and described on page 10, line 26, through page 11, line 16, of the present application.

Claim 5

Claim 5 recites a golf putter having a head and a shaft which is attached to the head. The putter is designed such that the moment of mass inertia of the head constitutes less than 79 percent of the total moment of inertia of the head and the shaft when the putter is pivoted about a pivot axis which is perpendicular to the longitudinal axis of the shaft and is situated about 120 centimeters from the longitudinal axis of the head. This arrangement is neither taught nor suggested by the art.

Kobayashi et al '518 teaches weighting a putter by adding weight to the grip and to the head, the grip being fixed to the free shaft end opposite the club head. Kobayashi et al '518 discloses the effect of a 320- and 360-gram head together with 35-, 60-, 160- or 200-gram add-ons to a standard 65-gram grip (see Table 1), all embodiments having a standard 115-gram steel shaft (column 6, lines 35-36), even through carbon black or any other lightweight shaft can be used (column 6, lines 39-40). Even clubs with added grip weight of 50-, 100-, 150- and 200-grams are disclosed (see column 5, lines 56-60).

Kobayashi et al '518 fails to teach a heavier shaft, per the present application. The benefit of adding weight to the putter by using a heavier shaft results in less components (simplified manufacturing), cheaper product and increased rigidity (less risk of vibrations during any phase of the stroke, causing increased stability). These benefits are not obtained by the putter taught by Kobayashi et al '518.

Kobayashi et al '518 gives no indication that could lead one skilled in the art to derive the heavier shaft of claim 5, wherein the moment of mass inertia of the head constitutes less than 79 percent of the total moment of inertia of the head and the shaft when the putter is pivoted about the claimed pivot axis. In fact, it is stressed in column

6, lines 43-57 of Kobayashi et al '518 that the weighting of the grip and the head offers the desired benefits, the weight of the shaft never being touched.

As such, claim 5 is not anticipated by Kobayashi et al '518.

Alzano '687 teaches away from the present invention by requiring a golf club having a head and a connection bar with shock absorbing items. A longitudinally movable counterbalance weight is attached to the shaft to vary the center of gravity of the club. Alzano '687 also fails to teach or suggest the head and shaft of claim 5.

Getts '378 merely teaches a golf club counterweight for releasable attachment to, and relocation upon, a golf club shaft, providing a shaft aperture and friction means within the weight member. Getts '378 also fails to teach or suggest the head and shaft of claim 5.

In view of the comments provided above, claim 1 is believed allowable over the applied references.

Claims 6-16

Claims 6-16 depend directly or indirectly from claim 5 and are thus believed allowable for the reasons stated above as well as the detailed subject matter recited therein.

The art fails to teach or suggest a golf putter wherein the moment of mass inertia of the head constitutes between 30%-75% of the total inertia of the head and the shaft, per claim 6.

The art fails to teach or suggest the claimed golf putter, wherein the mass of the shaft is evenly graduated along the entire length of the shaft, per claim 7. As stated above, the art merely teaches the addition of adjustable and/or releasable weights that are added to the club shaft, club grip, and/or club head.

The art fails to teach or suggest the claimed golf putter, wherein the moment of mass inertia of the head constitutes less than 79% of the total moment of inertia of the head, the grip and the shaft when the putter is pivoted about the pivot axis, per claim 9.

The art fails to teach or suggest the claimed golf putter, wherein the moment of mass inertia of the head constitutes between 30%-75% of the total moment of inertia of the head, the grip and the shaft, per claim 10.

The art further fails to teach or suggest the claimed golf putter, wherein the mass of the shaft divided by the length of the shaft is at least 170 grams per meter of shaft in a shaft which is up to 1 meter long and at least 190 grams per meter of shaft in a shaft which is longer than 1 meter, per claims 11-15.

Claim 17

Claim 17 recites a golf club shaft arranged to be attached to a golf club head. The mass of the shaft divided by the length of the shaft is at least 170 grams per meter of shaft in a shaft which is up to 1 meter long and at least 190 grams per meter of shaft in a shaft which is longer than 1 meter. As discussed above, the art fails to teach or suggest such a golf club shaft.

Claim 18

Claim 18 depends from claim 17 and further recites that the mass of the shaft is evenly graduated along the entire length of the shaft. This aspect is neither taught nor suggested by the art, which as noted above relates to the addition of weights to the club shaft and/or the club head.

Claim 19

Claim 19 recites a golf club shaft arranged to be attached to a golf club head, wherein the mass of the shaft is in the range of 180-230 grams, the shaft's length being in the range of 0.78 to 0.99 meters. The art fails to teach or suggest such a shaft, per the comments above.

Claims 20 and 21

Claims 20 and 21 depend from claim 19 and are thus believed allowable for the reasons stated above as well as the detailed subject recited therein.

Claim 22

Claim 22 recites a golf putter wherein a mass of the shaft is evenly graduated along the entire length of the shaft and the moment of mass inertia of the head constitutes

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less than 79% of the total moment of inertia of the head and the shaft when the putter is pivoted about a pivot axis, which is perpendicular to the longitudinal axis of the shaft and is situated about 120 centimeters from the longitudinal axis. As discussed above, the art fails to teach or suggest a golf putter. As such, claim 22 is believed allowable for the reasons stated above.

Claims 23-27

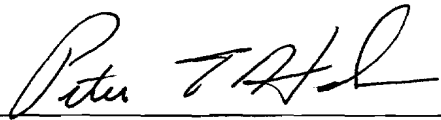
Claims 23-27 depend directly or indirectly from claim 22 and are thus believed allowable for the reasons stated above, as well as the detailed subject matter recited therein.

Conclusion

The present Application is thus believed in condition for allowance. Such action is respectfully requested.

Respectfully submitted,

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